ABSTRACT OF THE DISCLOSURE

A network access server (NAS) provides a connection to a user in a data communications network, where the NAS is capable of communicating with a home gateway server (HGS) maintaining a pool of IP addresses for allocation to authorized users associated with the NAS. The NAS includes a first memory for storing an identification of a user, an requester for asking the HGS for an IP address on behalf of the user; and a second memory associated with the first memory for storing the IP address of the user received from the HGS. The NAS may further include a detector for periodically detecting connection of the user to the NAS and a keep-alive sender for periodically informing the HGS that the user is still connected to the NAS, a receiver for receiving periodic queries from the HGS about the status of the user connection to the NAS and a responder responsive to said periodic queries for informing the HGS that the use is still connected to the NAS, and/or a receiver for receiving periodic signals from the user and a forwarder responsive to said receiver for forwarding information to the HGS that the user is still connected to the NAS. A home gateway server (HGS) provides mechanisms to assign an IP address to a user via a NAS, and to monitor the status of the IP address after assignment.